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State of Ohio Environmental Protection Agency

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Bob Taft, Governor
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August 27, 2002

Mr. Johnny Reising
U.S. Department of Energy, Fernald Area Office
P.O. Box 538705
Cincinnati, OH 45253-8705

Re: DISAPPROVAL - CERTIFICATION REPORT FOR AREA 9, PHASE 1

Dear Mr. Reising:

Ohio EPA has reviewed DOE's June 11, 2002 submittal of the "Certification Report for Area 9, Phase 1, 21120-RP-0004 Rev B." Based upon our review, Ohio EPA has the attached comments on this document.

If you have any questions, please contact me at (937) 285-6466.

Sincerely,

Thomas A. Schneider
Fernald Project Manager
Office of Federal Facilities Oversight

cc: Jim Saric, U.S. EPA
Terry Hagen, FDF
Mark Shupe, HSI GeoTrans
Mary Cullerton, Tetra Tech Inc.
Ruth Vandergrift, ODH
Mark Navarre, OEPA Legal

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1.	Commenting Organization: OEPA Section #: Pg. #: Line #: Code: C Original Comment # Comment: The data set seems to include an unusual number of "J" qualified data. Previous certification reports have not demonstrated this level of estimated results. Considering the nature of this report and the weight being placed on the data, a more thorough discussion of these qualifiers is needed.	Commentor: OFFO
2.	Commenting Organization: OEPA Section #: Pg. #: ES-2 Line #: 23-27 Original Comment # Comment: The inclusion of UMTRCA within this discussion is not well justified. This legislation was reviewed in the OU5 FS and found to not be sufficiently protective thus requiring risk-based cleanup levels. To now use it to justify the proposal to not conduct remediation raises some issues. Also the inclusion of it as an "independent point of reference" is confusing. What is DOE intending this too mean?	Commentor: OFFO Code: C
3.	Commenting Organization: OEPA Section #: 3.1 Pg. #: 3-4 Original Comment # Comment: The first three sentences of this paragraph are unclear. Please clarify why CU11 did not submit archive samples and how did the results from other CU's affect CU11?	Commentor: OFFO Line #: 23-26 Code: C
4.	Commenting Organization: OEPA Section #: 4.3 Pg. #: 4-5 Original Comment # Comment: Sample identification number shows "2" as the depth indicator. Should "2" be used for both surface and subsurface depth?	Commentor: OFFO Line #: 33 Code: C
5.	Commenting Organization: OEPA Section #: 5.1.1 Pg. #: 5-4 Line #: 5 Original Comment # Comment: Replace "teat" with "test"	Commentor: OFFO Code: E
6.	Commenting Organization: OEPA Section #: 5 Pg. #: 5-4 Original Comment # Comment: The hypothesis formulation is inconsistent with the preference indicated in recent US EPA guidance (US EPA, 1996). This guidance indicates that it is preferable to choose the null and alternative hypotheses in light of the consequences of making an incorrect decision. The true condition that occurs with the more severe decision error (not what would be decided in error based on the data) should be defined as the	Commentor: GeoTrans, Inc. Line #: 4 Code: C

null hypothesis. Given this preference, the SEP formulation of defining Ho as "mean CU concentration exceeds the FRL" should be adhered to.

7. Commenting Organization: OEPA Commentor: OFFO
Section #: 5.1.2 Pg. #: 5-5 Line #: 4-7 & 13-16 Code: C
Original Comment #
Comment: It appears that two different tests were conducted for Arsenic and Beryllium as the conclusion statements are different. If this is the case why are two different tests being used (e.g., As = Bkgd. & Be < Bkgd.)? If different tests were not used then the text should be the same.
8. Commenting Organization: OEPA Commentor: OFFO
Section #: 5.1.2 Pg. #: 5-5 Line #: 11 Code: E
Original Comment #
Comment: Delete "that."
9. Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: 5 Pg. #: 5-8 Line #: 17 Code: C
Original Comment #
Comment: The statement that the levels at which radium-226 is present in CUs 6 and 14 "cannot be statistically differentiated from the FRL" is misleading. The null hypothesis of the "mean CU concentration equals the FRL" is never proven to be true. It is assumed to be true until proven otherwise. The text should indicate that the stated conclusion is an assumption based on the available data.
10. Commenting Organization: OEPA Commentor: OFFO/GeoTrans, Inc.
Section #: 5 Pg. #: 5-8 Line #: 21 Code: C
Original Comment #
Comment: Given that it may not be technically feasible to show that the mean radium-226 concentration is less than the FRL through the collection of soil samples and the performance of statistical comparisons, a potential alternative course of action might be to conduct a risk analysis to show that the observed levels of this constituent do not pose a significant risk. The FRL is a general number intended to apply statewide. An assessment focused on Area 9 Phase I and based on the observed concentration data would be more appropriate to support the case for "no remedial actions required" than the analyses and discussions provided in the text.

A more understandable discussion of risk in section 5.2 is necessary as well as potentially moving the data from Appendix D into this section. The entirety of DOE's argument for not conducting remediation lies on the justification of acceptable risk. A revision of the section to more thoroughly and clearly discuss the risk for the two CU's is appropriate.